

In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1. (original): A compound of the Formula I:

$$R^{1}R^{2}N$$
 N
 R^{4}
 R^{5}
 R^{5}
 R^{5}
 R^{5}
 R^{5}
 R^{6}
 R^{6}
 R^{6}

Formula I

wherein:

R¹ and R² are independently selected from hydrogen, (1-6C)alkylsulfonyl, phenyl(CH₂)_u- wherein u is 0, 1, 2, 3, 4, 5 or 6, (1-6C)alkanoyl, (1-6C)alkyl, (1-6C)alkoxycarbonyl, (3-6C)cycloalkyl(CH₂)_x- in which x is 0, 1, 2, 3, 4, 5 or 6, or a 5 or 6 membered heteroaryl ring, or R¹ and R² together with the nitrogen atom to which they are attached represent a saturated or partially saturated 3 to 7 membered heterocyclic ring optionally containing another hetero atom selected from N or O;

wherein the (1-6C)alkyl, the (1-6C)alkanoyl and the (3-6C)cycloalkyl groups are optionally substituted by one or more groups independently selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy, (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, carbamoyl, mono(1-6C)alkylcarbamoyl, di-[(1-6C)alkyl]carbamoyl, –N(R^d)C(O)(1-6C)alkyl in which R^d is hydrogen or (1-6C)alkyl, a saturated or partially saturated 3 to 7 membered heterocyclic ring, or a 5 or 6 membered heteroaryl ring,

wherein the (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy and (1-6C)alkoxy(1-6C)alkoxy(1-6C)alkoxy groups and the (1-6C)alkyl groups of the mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, mono(1-6C)alkylcarbamoyl, di-[(1-6C)alkyl]carbamoyl and/or -N(R^d)C(O)(1-6C)alkyl groups are optionally substituted by one or more hydroxy groups;

wherein the phenyl is optionally substituted by one or more groups independently selected from halo, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups



are optionally substituted by one or more groups independently selected from hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino;

and wherein any heterocyclic and heteroaryl rings within R¹ and/or R² are optionally independently substituted by one or more of the following: (1-4C)alkyl, (1-4C)alkoxy, (1-4C)alkoxy(1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, a saturated or partially saturated 3 to 7 membered heterocyclic ring or -C(O)(CH₂)_zY wherein z is 0, 1, 2 or 3 and Y is selected from hydrogen, hydroxy, (1-4C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring;

and provided that when R¹ and/or R² is a (1C)alkanoyl group, then the (1C)alkanoyl is not substituted by fluoro or hydroxy;

R³ and R⁴ are independently selected from hydrogen, (1-6C)alkyl or (1-6C)alkoxy, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from: fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, carbamoyl, mono(1-6C)alkylcarbamoyl or di-[(1-6C)alkyl]carbamoyl, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, (1-4C)alkoxy, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring; or one of R³ and R⁴ is as defined above and the other represents a group -NR¹R² as defined above:

A represents an aryl group or a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl;

R⁵ is selected from cyclopropyl, cyano, halo, (1-6C)alkoxy or (1-6C)alkyl, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by cyano or by one or more fluoro;



- L is attached meta or para on ring A with respect to the point of attachment of the ethynyl group and represents -C(R^aR^b)C(O)N(R⁹)-, -N(R⁸)C(O)C(R^aR^b)-, -N(R⁸)C(O)N(R⁹)-, -N(R⁸)C(O)O-, or -OC(O)-N(R⁹)-, wherein R⁸ and R⁹ independently represent hydrogen or (1-6C)alkyl and wherein R^a and R^b independently represent hydrogen or (1-6C)alkyl or R^a and R^b together with the carbon atom to which they are attached represent (3-6C)cycloalkyl;
- **B** represents a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring, an aryl group, a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl, or a 8, 9 or 10 membered bicyclic group which optionally contains 1, 2, 3 or 4 heteroatoms independently selected from N, O and S and which is saturated, partially saturated or aromatic;
- R⁶ is selected from halo, cyano, oxo, a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring, and -N(R^c)C(O)(1-6C)alkyl in which R^c is hydrogen or (1-6C)alkyl; or
- R⁶ is selected from (1-6C)alkyl, -S(O)_p-(1-6C)alkyl wherein p is 0, 1 or 2, or (1-6C)alkoxy, wherein the (1-6C)alkyl, -S(O)_p-(1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, a (3-7C)cycloalkyl ring or a saturated or partially saturated 3 to 7 membered heterocyclic ring; and

wherein the (3-7C)cycloalkyl ring and saturated or partially saturated 3 to 7 membered heterocyclic ring are optionally independently substituted by one or more groups selected from (1-6C)alkyl; and

m is 0, 1, 2 or 3;

and when B is a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a saturated or partially saturated 8, 9 or 10 membered bicyclic group, the rings and the bicyclic group optionally bear 1 or 2 oxo or thioxo substituents:



and salts thereof.

and salts thereof.

- 2. (original): A compound of Formula I according to Claim 1, wherein:
 - R⁶ is selected from halo, cyano, a (3-7C)cycloalkyl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring or an alkanoylamino group -N(R^c)C(O)(1-6C)alkyl in which R^c is hydrogen or (1-6C)alkyl; or R⁶ is selected from (1-6C)alkyl or (1-6C)alkoxy, wherein the (1-6C)alkyl and the (1-6C)alkoxy groups are optionally substituted by one or more groups independently selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, a (3-7C)cycloalkyl ring or a saturated or partially saturated 3 to 7 membered heterocyclic ring;
- 3. (original): A compound of the Formula I according to claim 1, wherein:
 - R¹ and R² are independently selected from hydrogen, (1-6C)alkylsulfonyl, phenyl(CH₂)_u- wherein u is 0, 1, 2, 3, 4, 5 or 6, (1-6C)alkanoyl, (1-6C)alkyl, (1-6C)alkoxycarbonyl, or (3-6C)cycloalkyl(CH₂)_x- in which x is 0, 1, 2, 3, 4, 5 or 6 or R¹ and R² together with the nitrogen atom to which they are attached represent a saturated or partially saturated 3 to 7 membered heterocyclic ring optionally containing another hetero atom selected from N or O;
 - wherein the alkyl and the cycloalkyl groups are optionally substituted by one or more groups selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring;
 - and wherein the phenyl is optionally substituted by one or more groups selected from halo, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, wherein the (1-6C)alkyl or (1-6C)alkoxy are optionally substituted by hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino;
 - R³ and R⁴ are independently selected from hydrogen, (1-6C)alkyl or (1-6C)alkoxy wherein the alkyl and the alkoxy groups are optionally substituted by one or more



groups selected from fluoro, hydroxy, (1-6C)alkyl, (1-6C)alkoxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring, wherein said heterocyclic and heteroaryl rings are optionally independently substituted by one or more of the following: (1-4C)alkyl, hydroxy, amino, mono(1-6C)alkylamino or di-[(1-6C)alkyl]amino or a saturated or partially saturated 3 to 7 membered heterocyclic ring;

- or one of R^3 and R^4 is as defined above and the other represents a group $-NR^1R^2$ as defined above:
- **R**⁵ is selected from cyano, halo, (1-6C)alkoxy or (1-6C)alkyl optionally substituted by cyano or by one or more fluoro;
- **B** represents a (3-7C)cycloalkyl ring, an aryl or a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl;
- R⁶ is selected from halo, cyano, a saturated or partially saturated 3 to 7 membered heterocyclic ring or an alkanoylamino group -N(R^c)C(O)(1-6C)alkyl in which R^c is hydrogen or (1-6C)alkyl; or R⁶ is selected from (1-6C)alkyl or (1-6C)alkoxy, wherein the alkyl and the alkoxy groups are optionally substituted by one or more groups selected from cyano, fluoro, hydroxy, (1-6C)alkoxy, amino, mono(1-6C)alkylamino, di-[(1-6C)alkyl]amino, or a saturated or partially saturated 3 to 7 membered heterocyclic ring; and
- m is 0, 1, 2 or 3; and when m is at least 2 then two substituents on adjacent carbon atoms in ring B may together represent a methylenedioxy group;

and wherein A, L and n are as defined in Claim 1. and salts thereof.

4. (currently amended): A compound according to any one of Claims 1, 2 and 3 wherein A is selected from phenyl, pyridyl, thiazolyl, thiadiazolyl or pyrimidinyl.



- 5. (currently amended): A compound accordingly to any one of the preceding claims claim 1 wherein B is selected from phenyl, 2,3-di-hydro-indenyl, piperidinyl, pyridyl, pyrazolyl, isothiazolyl, thiadiazolyl, isoxazolyl, benzodioxinyl, benzodioxolyl or tetrahydropyranyl
- 6. (currently amended): A compound accordingly to any one of the preceding claims claim 1 wherein L is selected from -N(R⁸)C(O)N(R⁹)-, -N(R⁸)C(O)O- or -N(R⁸)C(O)CH₂-wherein R⁸ and R⁹ independently represent hydrogen or (1-6C)alkyl.
- 7. (currently amended): A compound accordingly to any one of the preceding claims claim 1 wherein R¹ and R² are both hydrogen or R¹ is hydrogen or (1-6C)alkyl and R² is (1-6C)alkyl
 - wherein (1-6Calkyl) is optionally substituted by hydroxy, amino, carbamoyl, mono(1-6C)alkylamino or di(1-6C)alkylamino, (1-6C)alkoxy, (1-6C)alkoxy(1-6C)alkoxy, -N(Rd)C(O)(1-6C)alkyl in which Rd is hydrogen or (1-6C)alkyl, aryl (particularily phenyl), a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring;
 - wherein the (1-6C)alkoxy, mono(1-6C)alkylamino and -N(R^d)C(O)(1-6C)alkyl groups are optionally substituted by hydroxy;
 - wherein an aryl ring, a saturated or partially saturated 3 to 7 membered heterocyclic ring or a 5 or 6 membered heteroaryl ring is optionally substituted by (1-4C)alkyl, (1-4C)alkoxy or -C(O)CH₂Y wherein Y is selected from hydroxy or di(1-6C)alkylamino.
- 8. (currently amended): A compound accordingly to any one of the preceding claims claim 1 wherein R³ and R⁴ are both hydrogen.
- 9. (currently amended): A compound accordingly to any one of the preceding claims claim 1 wherein R⁶ is independently selected from halo, cyano, oxo, (3-7C)cycloalkyl, a saturated 3 to 7 membered heterocyclic ring (optionally substituted by (1-4C)alkyl), -N(R^c)C(O)(1-6C)alkyl wherein R^c is hydrogen or (1-6C)alkyl (particularily (1-4C)alkyl), (1-6C)alkyl (optionally substituted by up to three groups independently selected from halo) or (1-6C)alkoxy and m is selected from 1 or 2.
- 10. (original): A compound according to Claim 1 which is any one or more of examples 1 to 152 or a salt thereof.



- 11. (currently amended): A pharmaceutical composition which comprises a compound of the Formula I, or a pharmaceutically acceptable salt thereof, as defined in claims 1 to 40 in association with a pharmaceutically acceptable diluent or carrier.
- 12. (canceled)
- 13. (canceled)
- 14. (canceled)
- 15. (currently amended): A process for preparing a compound of formula I, or salt thereof, as defined in Claim 1, or a pharmaceutically acceptable salt thereof (wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹ L , ring A and ring B, n and m are, unless otherwise specified, as defined in Claim 1) comprising:
 - (a) For compounds of the formula I wherein L is -N(R⁸)C(O)N(H)-, the reaction of a compound of the formula II:

wherein R¹, R², R³, R⁴, R⁵, R⁸, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an isocyanate of the formula IV:

$$O = N - \left(\frac{(R^6)_m}{B} \right)$$

wherein R⁶, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or



(b) For compounds of the formula I wherein L is -N(R⁸)C(O)N(H)-, the reaction of a compound of the formula II as defined above with an aryl carbamate of the formula III:

wherein Ar is a suitable aryl group, for example phenyl, and R⁶, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(c) For compounds of the formula I wherein L is N(R⁸)C(O)-O-, the reaction of a compound of the formula II as defined above with a compound of the formula XI:

$$Lg^{1} O B^{(R^{6})_{m}}$$

ΧI

wherein Lg¹ is a suitable displaceable group for example halogeno (such as fluoro, chloro or bromo) and R⁶, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(d) For compounds of the formula I wherein L is N(R⁸)C(O)C(R^aR^b), the reaction of a compound of the formula II as defined above with a compound of the formula IX:

$$Lg^{2}$$

$$R^{b}$$

$$R^{b}$$

wherein Lg² is a suitable displaceable group, R^x-C(O)-O- or R^x-O- (wherein R^x is a suitable alkyl or aryl group) and R⁶, R^a, R^b, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(e) For compounds of the formula I wherein L is -N(R⁸)C(O)N(H)-, the reaction of a compound of the formula II as defined above with a trichloroacetylamine of the formula XIII:



$$CCI_3$$
 N
 B
 $XIII$

wherein R⁶, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(f) For compounds of the formula I wherein L is -C(R^aR^b)C(O)N(R⁹)-, the reaction of a compound of the formula XIV:

wherein Lg^2 is a suitable displaceable group as described above and R^1 , R^2 , R^3 , R^4 , R^5 , R^a , R^b , n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV:

$$\begin{array}{c}
H \\
R^9 \\
\end{array}
N$$

$$\begin{array}{c}
(R^6)_m \\
B
\end{array}$$

wherein R⁶, R⁹, m and B have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(g) The reaction of a compound of the formula XVI:

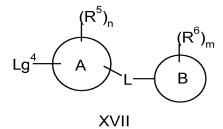
$$Lg^{3} \longrightarrow \begin{pmatrix} R^{3} & & & & & \\ & & & & & \\ N & & & & & \\ R^{4} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

wherein Lg³ is a suitable displaceable group for example halogeno (such as fluoro, chloro, brome or iodo), methyl sulfonyl, methylthio or aryloxy (such as phenoxy) and R³, R⁴, R⁵, R⁶, n, m, A, B and L have any of the meanings defined



hereinbefore except that any functional group is protected if necessary, with an amine of the formula HNR¹R², wherein R¹ and R² have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(h) The reaction of a compound of the formula XVII:



wherein Lg⁴ is a suitable displaceable group for example halogeno (such as chloro, brome or iodo) or a sulfonyloxy group (such as trifluoromethylsulfonyloxy) and R⁵, R⁶, n, m, A, B and L have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an alkyne of the formula XVIII:

$$R^{1}R^{2}N \longrightarrow \begin{pmatrix} N = \begin{pmatrix} R^{3} \\ N = \end{pmatrix} -H$$

$$R^{4}$$

XVIII

wherein R¹, R², R³ and R⁴ have any of the meanings defined hereinbefore except that any functional group is protected if necessary; or

(i) For compounds of the formula I wherein L is $-N(H)C(O)N(R^9)$ -, the reaction of an isocyanate of the formula XIX:

$$R^{1}R^{2}N \xrightarrow{N} R^{4} XIX$$

$$R^{1}R^{2}N \xrightarrow{R^{4}} N = 0$$

wherein R¹, R², R³, R⁴, R⁵, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV as defined above; or

(j) For compounds of the formula I wherein L is -N(H)C(O)N(R⁹)-, the reaction of a compound of the formula XX:



wherein Ar is a suitable aryl group, for example phenyl, and R¹, R², R³, R⁴, R⁵, n and A have any of the meanings defined hereinbefore except that any functional group is protected if necessary, with an amine of the formula XV as defined above.

and thereafter if necessary:

- i) converting a compound of the Formula (I) into another compound of the Formula (I);
- ii) removing any protecting groups;
- iii) forming a salt.
- 16. (currently amended): A compound selected from Formulae II, XIV, XVI, XIX and XX as defined in Claim 15, wherein A is a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl

or a compound of Formula VIc:

$$Lg^{3} \longrightarrow \begin{pmatrix} R^{3} & (R^{5})_{n} \\ N \longrightarrow & A \end{pmatrix}_{NH_{2}}$$

VIc

or salt thereof, wherein A is a 5 or 6 membered heteroaryl ring selected from furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazinyl and Lg3Lg³, R³, R⁴, R⁵ and n are as defined in Claim 15.

17. (new): A method of inhibiting Tie2 receptor tyrosine kinase in a warm-blooded animal in need of such treatment, which comprises administering to said animal an effective amount of a compound of the formula I, or a pharmaceutically acceptable salt thereof, according to claim 1.



18. (new): A method for producing an anti-angiogenic effect in a warm-blooded animal in need of such treatment, which comprises administering to said animal an effective amount of a compound of the formula I, or a pharmaceutically acceptable salt thereof, as claimed in claim 1.